Amendment to the Specification:

Please amend the specification as follows:

Please amend the specification on page 3, lines 27-28, as follows:

--FIG. 3 is a schematic diagram of the apparatus of FIG. 2 rotated to a changed position; [and]--

Please amend the specification on page 4, lines 1-2, as follows:

--FIG. 4 is a schematic diagram of an alternative embodiment of an apparatus to study nerve conduction in accordance with the present invention; and--

Please amend the specification on page 5, lines 26-30 to page 6, lines 1-3, as follows:

--The controller 55 is electrically connected to the excitation source 15, the sensing electrode 25, the pressure sensor 35, the input device 40, the output device 45, and the light source 50. One embodiment of the controller 55 includes a processor 57 configured by one or more modules of software to operate the apparatus. The processor 57 includes a program storage 58 and a memory storage 59. The program storage 58 contains the one or modules of software [instructions] that configure the processor 57. The memory storage 59 provides for storage of data received by the controller 55 (e.g., pressure readings, CMAP signals, etc.).

Please amend the paragraph on page 6, lines 9-16, as follows:

-- Fig. 2 shows a first embodiment of the apparatus 10 having a pressure mounting structure 65. The pressure mounting structure 65 is operatively connected to the sensing electrode 25 for controlling the pressure at which the sensing electrode 25 engages the [hand 62] hand 67 of the patient. In addition, it is intended that pressure mounting structure 65 orient the sensing electrode 25 at a user selected location on the [hand 62] hand 67, as hereinafter described. Of course, other embodiments of the apparatus 10 and pressure mounting structure 65 can be configured to analyze other miscellaneous nerves or muscles on feet, arms, legs, etc.--

Please amend the paragraph on page 6, lines 17-30, and on page 7, lines 1-3, as follows:

-- The pressure mounting structure 65 includes a platform 70 attached to or mounted with a vertical support 75. The platform 70 includes a flat, rigid surface that can be part of a support stand or a separate panel component. The vertical support 75 is a rigid structure mounted to the platform 70 by a pair of fasteners (e.g., bolts and nuts, screws, spot-weld, etc.). The vertical support 75 and/or platform 70 are configured to provide support for receiving and bearing against the [hand 62] hand 67 of the patient. The pressure mounting structure 65 further includes a horizontal support 80 having a first end 81a attached normal relative to the vertical support 75, and an opposite second end 81b. A vertical adjuster 82 is mounted to second end 81b of horizontal support 80 and is configured to variably adjust the vertical position of the horizontal support 80 and attached pressure source 30, pressure sensor 35, and sensing electrode 25 relative to the [hand 62] hand 67 positioned on the platform 70. The vertical adjuster 82 includes a slide 83 moveable along a channel 84 vertically extending along the vertical support 75. The adjuster 82 is attached by a pair of fasteners (e.g., bolt and nut, screw, spot-weld, etc.) to the horizontal support 80. The type vertical hold (e.g., tightening screw, pinch against channel, etc.) to maintain the position of the adjuster 82 and attached horizontal support 80 can vary.--

Please amend the paragraph on page 7, lines 4-20, as follows:

-- The pressure mounting structure 65 further includes an angle positioning device operatively connected to the second end 81b of horizontal support 80 for controlling an angle at which the sensing electrode 25 engages the hand. In the depicted embodiment, the angle positioning device includes a dial 85 rotatably mounted to the second end 81b of the horizontal support 80. The dial 85 is in pivotal support of the pressure source 30 and sensing electrode 25. The dial 85 is configured to position the sensing electrode 25, the pressure source 30, and the pressure electrode 35 at various desired rotational angles for engaging the [hand 62] hand 67 of the patient. The dial 85 includes a disc 86 attached at the center by a hinge 87 to the second end 81b of the horizontal support 80. A bracket 89 attached to the disc [84] 86 supports the pressure source 30. The type of fastener and/or bracket 89 can vary. The composition (e.g., wood, plastic, metal, etc.) of the above-described elements of the support structure 65 can vary. The type of angular position holder (e.g., tightening screw, friction, etc.) to maintain the angular position of the disc 86 and to attach disc 86 relative to the platform 70 can vary. The horizontal support 80 and dial 85 are configured to allow the pressure source 30, pressure sensor 35, and sensing electrode 25 to engage various locations of the patient's [hand 62] hand 67 at various positions against the platform 70 and/or vertical support 75. --

Please amend the paragraph on page 7, lines 21-26, as follows:

-- As shown in Fig. 2, the pressure source 30 includes a micrometer 90 having one end 92 configured to bias the sensing electrode 25 against a [hand 62] hand 67 supported against the platform 70. The other end of the micrometer 90 includes an adjustment knob 95. The physician can slide the vertical adjustment [87] 82 and horizontal support 80 and rotate the dial 85 to change position of the micrometer 90 so as to provide a controlled application of pressure to the sensing electrode 25. --

Please amend the paragraph on page 7, lines 27-30 and on page 8, lines 1-5, as follows:

-- Pressure sensor 35 may include a load cell 100 positioned between the first end 92 of the micrometer 90 and the sensing electrode 25. The load cell 100 can have its own power supply or receive electrical power from the controller 55. The load cell 100 provides the pressure signal to the controller 55. Light source 50 is disposed between the load cell and the sensing electrode 25. Alternatively, the light source 50 can be positioned at other locations (e.g., underneath the hand, designated support, etc.). The sensing electrode 25 is attached to the apparatus 10. Alternatively, the sensing electrode 25 can be individually positioned on the patient's [hand 62] hand 67 separate from the remaining elements of the apparatus 10.--

Please amend the paragraph on page 8, lines 6-10, as follows:

-- The controller 55 controls activation of the light source 50. For example, the controller 55 may provide a signal that activates the light source upon detecting the sensing electrode 25 making contact with the [hand 62] hand 67. Alternatively, the controller 55 may provide the electrical power to the light source based on a manual/automatic switch disposed at the controller or at the light source itself.--

Please amend the paragraph on page 8, lines 11-15, as follows:

-- The controller 55 is also electrically connected to the sensing electrode 25 and the load cell [80] 100. The excitation source 15 is shown separated from the controller 55. Of course, another embodiment of the apparatus 10 can include the excitation source 15 adjacent the controller 55 in a housing. An electrical ground is attached to the arm of the patient to complete the electrical circuit with the excitation source 15 and electrode 20.--

Please amend the paragraph on page 8, lines 16-21, as follows:

-- Fig. 3 shows another illustration of the apparatus 10 at a rotated position relative to the patient's [hand 62] hand 67 supported against the vertical support 75 and platform 70 of the apparatus 10. The dial 85 is configured to position the micrometer 90, load cell 100, light source 50, and excitation electrode 25 in various rotational positions to properly apply normal pressure to and acquire an adequate conduction signal from the sensing electrode 25 positioned on the [hand 62] hand 67 of the patient. --

Please amend the paragraph on page 8, lines 22-30 and on page 9, lines 1-4, as follows:

-- Fig. 4 shows yet another embodiment of an apparatus 200 for performing a nerve conduction study on a patient. The apparatus 200 includes a sensing electrode 225 configured to acquire a conduction signal from the [hand 62] hand 67. The apparatus 200 also includes a pressure source 230 having a micrometer 290 and an adjustment knob 295 coupled with a strap 297. The adjustment knob 295 is configured to change the tension of a strap 297 wrapped around at least a portion of the [hand 62] hand 67, thereby applying a controlled pressure to the sensing electrode 225. By increasing the tension of the strap 297, the physician can controllably increase the application of pressure applied by the micrometer 290 against the sensing electrode 225. A load cell 300 acquires a reading of the applied pressure by the pressure source 230. The type of pressure source 230 (e.g., human, vise, etc.) and strap 297 (e.g., perforated, belt, etc.) can vary. A controller 355 is electrically connected to receive signals from the sensing electrode 225 and the load cell 300 similar to the apparatus described in Fig. 2. –

Please amend the paragraph on page 9, lines 13-29, as follows:

-- As shown in Fig. 5 and at act 405, a physician activates or starts the apparatus 10. The patient positions a [hand 62] hand 67 on the apparatus 10 for nerve conduction study. The light source 50 can illuminate the grid 56 to provide a reference for positioning the sensing electrode 25 at the same location on the hand. At act 410, a physician positions the excitation electrode 20 and the sensing electrode 25 on the patient. In one embodiment, the physician positions an excitation electrode 20 at or near the elbow of the patient. The physician positions the sensing electrode 25 near a selected nerve in the patient's [hand 62] hand 67. The excitation electrode 20 is connected to the excitation source 15. A second electrode positioned on the patient is connected to electrical ground. At act 415, the physician determines whether the position of the sensing electrode 25 should be adjusted to more adequately acquire a CMAP signal from the selected nerve. At act 420, the physician applies pressure to the sensing electrode 25. In one embodiment and as shown in Fig. 2, the physician applies pressure by adjusting the extended position of the micrometer 90 biased against the sensing electrode 25 and the [hand 62] hand 67 of the patient. The change in extended position of the micrometer 90 applies additional pressure on the sensing electrode 25. The apparatus 10 is configured to provide repeatable degrees of pressure to the sensing electrode 25.--

Please amend the paragraph on page 10, lines 1-8, as follows:

-- The physician has a choice to select a research option (act 425) or clinical option (act 430) for performing the nerve conduction study. The research option is configured to study the general effect of variable pressure on the conduction signal acquired by the sensing electrode 25. The clinical option is generally configured to perform a nerve conduction study of a selected nerve of a patient. If [if] the research option (act 425) is selected, the physician determines whether the desired pressure is placed on the sensing electrode 25 (act 435). If not, then the physician adjusts the application of pressure by the pressure source 30 (act 420). --